REMARKS

Claims 1-16 are pending. Claims 8-10 and 12-14 are amended herein.

Examiner Interview

On March 24, 2005, John Wagner and William Zarbis (for the Applicants) and Examiners Gilberto Barron and Minh Dinh (of the U.S. Patent Office) participated in a phone interview to discuss the claim rejections cited in the instant Office Action. Applicants thank the Examiners for participating in the phone interview.

Double Patenting

The instant Office Action states that Claims 1-2, 4-10 and 12-16 are provisionally rejected under the judicially created (nonstatutory) doctrine of obviousness-type double patenting as being unpatentable over copending Application No. 10/245,172. Applicants respectfully note that, as stated in the instant Office Action, "The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy ... so as to prevent the unjustified or improper timewise extension of the 'right to exclude' granted by a patent and to prevent possible harassment by multiple assignees." The copending Application No. 10/245,172 has a filing date of September 16, 2002, which is after the filing date of the instant application. Because the expiration date of a patent is established based on its filing date, the instant application is set to expire before the copending application. Accordingly, Applicants respectfully submit that a terminal disclaimer is not necessary at this time. A terminal disclaimer can be filed if it is subsequently determined that a terminal disclaimer is necessary.

101 Rejections

The instant Office Action states that Claims 1-16 are rejected under 35 U.S.C. § 101 because the invention is directed to nonstatutory subject matter. Applicants respectfully disagree.

Independent Claims 1, 10 and 14 each recite "A computer readable medium having a data packet stored therein for causing a functional change in the operation of a device." The Examiner is respectfully directed to MPEP 2106, specifically Section IV.B.1(a) of MPEP 2106 (page 2100-13 of the Eight Edition Incorporating Revision No. 2), which states "a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory" (emphasis added). Applicants respectfully submit that Claims 1, 10 and 14 satisfy this test and are thus statutory. Accordingly, Applicants respectfully submit that the basis for rejecting Claims 1, 10 and 14 under 35 U.S.C. § 101 is traversed. Because Claims 2-9, 11-13 and 15-16 depend from either Claim 1, 10 or 14, Applicants respectfully submit that the basis for rejecting Claims 2-9, 11-13 and 15-16 under 35 U.S.C. § 101 is also traversed.

112 Rejections

The instant Office Action states that Claims 1-16 are rejected under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential elements, specifically the instruction or code that causes a functional change in the operation of a device.

Independent Claims 1 and 10 each recite a header portion that includes information used by a transcoder to transcode a data portion.

Independent Claims 1, 10 and 14 each recite a data portion, and independent Claims 10 and 14 each recite the data portion having a truncation point. Applicants respectfully submit that the requirements of 35 U.S.C. § 112, second paragraph, are satisfied by this information. Accordingly, Applicants respectfully submit that the basis for rejecting Claims 1, 10 and 14 under 35 U.S.C. § 112, second paragraph, is traversed. By virtue of their dependency on either Claim 1, 10 or 14, Applicants respectfully submit that the basis for rejecting Claims 2-9, 11-13 and 15-16 under 35 U.S.C. § 112, second paragraph, is also traversed.

103(a) Rejections

Claims 1-2, 4-10 and 12-16

The instant Office Action states that Claims 1-2, 4-10 and 12-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over "Efficient MPEG-4/H/263 Video Transcoder for Interoperability of Heterogeneous Multimedia Networks" by Dogan et al. ("Dogan") in view of "A Secure Video On Demand System" by Bachtiar et al. ("Bachtiar") and "Constrained and General Dynamic Rate Shaping of Compressed Digital Video" by Eleftheriadis et al. ("Eleftheriadis"). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 1-2, 4-10 and 12-16 is not anticipated nor rendered obvious by Dogan, Bachtiar and Eleftheriadis, alone or in combination.

Applicants respectfully submit that there must be some suggestion or motivation to combine Dogan, Bachtiar and Eleftheriadis. Applicants respectfully contend that there is no such suggestion or motivation in either Dogan, Bachtiar or Eleftheriadis.

Applicants respectfully submit that Dogan makes no mention of encryption.

Applicant respectfully submits that Bachtiar makes no mention of compression, and does not appear to describe progressive encryption. According to the instant application, "progressive encryption is defined as a process which takes original data (plaintext) as input and creates progressively encrypted data (ciphertext) as output, where the progressively encrypted data has the property that the first portion can be decrypted alone, without requiring information from the remainder of the original data; and progressively larger portions can be decrypted with this same property, in which decryption can require data from earlier but not later portions of the bitstream. Progressive encryption techniques include, for example, cipher block chains or stream ciphers. These progressive encryption methods have the property that the first portion of the data is encrypted independently, then later portions are encrypted based on earlier portions" (see at least page 14, lines 22-33, of the instant application).

Applicants respectfully submit that Eleftheriadis makes no mention of encryption.

Therefore, Applicants respectfully contend that there is no suggestion or motivation to combine Dogan, Bachtiar and Eleftheriadis.

Applicants respectfully disagree with the statements in the instant Office Action to the effect that it would have been obvious to one of ordinary skill in the art to combine the teachings of Dogan, Bachtiar and Eleftheriadis. Applicants respectfully submit that, at the time of the claimed invention, it was not obvious to combine the teachings of Dogan,

Bachtiar and Eleftheriadis. Applicants respectfully submit that the existing level of ordinary skill in the art at the time the claimed invention was made is summarized in the background art section of the instant application. As described therein, the prior art was problematic for many reasons, which can be generally summarized as a lack of capability to scale (e.g., transcode) data in a secure manner. It is reasonable to infer that these problems would not have persisted had the claimed invention been obvious. Instead, those of ordinary skill in the art continued to encounter the disadvantages of the prior art without obvious solution. Applicants respectfully assert that the fact that progressive encryption of scalably encoded data, as recited in the claims, was not implemented by those skilled in the art prior to the invention provides further evidence of the nonobviousness of the present claimed invention.

Applicants respectfully submit that, even in combination, Dogan, Bachtiar and Eleftheriadis at best only describe a method or system that is described by, and shares the problems of, the prior art described in the background art section of the instant application.

Applicants also respectfully disagree with the statement in the instant Office Action that "Since Dogan transcoder can transcode the data portion without decoding/re-encoding the data portion, there is no need for the transcoder to decrypt/re-encrypt the data portion." As mentioned above, Dogan makes no mention of encryption. Also as mentioned above, the state of the art at the time the claimed invention was made was that it was not possible to scale (transcode) data without decrypting the data. Applicants respectfully submit that Dogan is being attributed with functionality that is not supported by Dogan nor supported by the state of the art at the time. Applicants respectfully submit that just because one can transcode data

without decoding (decompressing) or re-encoding (recompressing) the data, one cannot infer that the data can be transcoded without decrypting and re-encrypting the data.

Applicants also respectfully disagree with the statement in the instant Office Action that "Eleftheriadis discloses ... an identified truncation point in the data portion of a packet." Eleftheriadis appears only to describe truncation points between blocks of data, not within the data portion of a data packet.

In summary, Applicants respectfully submit that Dogan, Bachtiar and Eleftheriadis (alone or in combination) do not show or suggest progressive encryption of scalably encoded data as recited in independent Claims 1, 10 and 14. Therefore, Applicants respectfully submit that Claims 1, 10 and 14 are considered patentable over Dogan, Bachtiar and Eleftheriadis (alone or in combination). Because Claims 2, 4-9, 12-13 and 15-16 depend from Claims 1, 10 or 14 and contain additional limitations, Claims 2, 4-9, 12-13 and 15-16 are also considered patentable over Dogan, Bachtiar and Eleftheriadis (alone or in combination). Therefore, Applicants respectfully submit that the basis for rejecting Claims 1-2, 4-10 and 12-16 under 35 U.S.C. § 103(a) is traversed.

Claims 3 and 11

The instant Office Action states that Claims 3 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dogan, Bachtiar and Eleftheriadis and further in view of "Performance Study of a Selective Encryption Scheme for the Security of Networked, Real-Time Video" by Spanos et al. ("Spanos"). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 3

and 11 is not anticipated nor rendered obvious by Dogan, Bachtiar, Eleftheriadis and Spanos, alone or in combination.

As presented above, Applicants respectfully submit that Dogan, Bachtiar and Eleftheriadis, alone or in combination, do not show or suggest the embodiments of the present claimed invention recited in independent Claims 1 and 10. Claim 3 is dependent on Claim 1 and recites additional limitations. Claim 11 is dependent on Claim 10 and recites additional limitations.

Applicants respectfully submit that Spanos does not overcome the shortcomings of Dogan, Bachtiar and Eleftheriadis. Spanos appears to only describe the encryption of I-frames in a compressed video stream. Hence, Applicants respectfully submit that Spanos (alone or in combination with Dogan, Bachtiar and Eleftheriadis) does not show or suggest progressive encryption, and in particular progressive encryption of scalably encoded data, as recited in independent Claims 1 and 10.

Therefore, Applicant respectfully submits that Dogan, Bachtiar, Eleftheriadis and Spanos, alone or in combination, do not show nor suggest the present invention as recited in independent Claims 1 and 10, and that Claims 1 and 10 are considered patentable over Dogan, Bachtiar, Eleftheriadis and Spanos (alone or in combination). Because Claims 3 and 11 depend from Claim 1 or 10 and contain additional limitations, Claims 3 and 11 are also considered patentable over Dogan, Bachtiar, Eleftheriadis and Spanos (alone or in combination). Therefore, Applicants respectfully submit that the basis for rejecting Claims 3 and 11 under 35 U.S.C. § 103(a) is traversed.

Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims.

Based on the arguments presented above, Applicants respectfully assert that Claims 1-16 overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these claims.

Applicants have reviewed the references cited but not relied upon. Applicants did not find these references to show or suggest the present claimed invention: U.S. Patent Nos. 6,505,299, 6,647,061 and 6,650,783; the Assunção et al. reference; and the Li reference.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

WAGNER, MURABITO & HAO LLP

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John P. Wagner, Jr.
Reg. No. 35,398

Two North Market Street
Third Floor
San Jose, California 95113
(408) 938-9060